TABLE 14-1E
WARM AIR FURNACES AND COMBINATION WARM AIR FURNACES/AIR-CONDITIONING UNITS,
WARM AIR DUCT FURNACES AND UNIT HEATERS,
MINIMUM EFFICIENCY REQUIREMENTS

Equipment Type	Size Category (Input)	Sub-Category or Rating Condition	Minimum Efficiency[b]	Test Procedure[a]
Warm Air Furnace, Gas-Fired	< 225,000 Btu/h (66 kW)		78% AFUE or 80% E_t[c]	DOE 10 CFR Part 430 or ANSI Z21.47
	≥225,000 Btu/h (66 kW)	Maximum Capacity[c] Minimum Capacity[c]	80% E_c[f]	ANSI Z21.47
Warm Air Furnace, Oil-Fired	< 225,000 Btu/h (66 kW)		78% AFUE or 80% E_t[c]	DOE 10 CFR Part 430 or UL 727
	≥225,000 Btu/h (66 kW)	Maximum Capacity[b] Minimum Capacity[b]	81% E_t[g] ——	UL 727
Warm Air Duct Furnaces, Gas-Fired	All Capacities	Maximum Capacity[b] Minimum Capacity[b]	80% E_c[e] ——	ANSI Z83.9
Warm Air Unit Heaters, Gas-Fired	All Capacities	Maximum Capacity[b] Minimum Capacity[b]	80% E_c[e] ——	ANSI Z83.8
Warm Air Unit Heaters, Oil-Fired	All Capacities	Maximum Capacity[b] Minimum Capacity[b]	80% E_c[e] ——	UL 731

[a] Reserved.
[b] Minimum and maximum ratings as provided for and allowed by the unit's controls.
[c] Combination units not covered by NAECA (3-phase power or cooling capacity greater than or equal to 65,000 Btu/h [19 kW]) may comply with either rating.
[d] E_t = Thermal efficiency. See test procedure for detailed discussion.
[e] E_c = Combustion efficiency (100% less flue losses). See test procedure for detailed discussion.
[f] E_c = Combustion efficiency. Units must also include an IID, have jacket losses not exceeding 0.75% of the input rating, and have either power venting or a flue damper. A vent damper is an acceptable alternative to a flue damper for those furnaces where combustion air is drawn from the conditioned space.
[g] E_t = Thermal efficiency. Units must also include an IID, have jacket losses not exceeding 0.75% of the input rating, and have either power venting or a flue damper. A vent damper is an acceptable alternative to a flue damper for those furnaces where combustion air is drawn from the conditioned space.